## What is claimed is:

- 1. A radiation dosimeter comprising:
- a scale,
- a dose indicator indicating dose accumulation on the scale, and
- a check time indicator producing an audible indication of the need to check dose accumulation.
  - 2. The radiation dosimeter of claim 1, further comprising:
- a stay time indicator producing an audible indication of the passage of a predetermined time period.
  - 3. The radiation dosimeter of claim 1, further comprising:
- a dose limit indicator producing an audible indication of an accumulation of a predetermined dose.
  - 4. The radiation dosimeter of claim 1, further comprising:
- a 3/4 scale point indicator producing an audible indication an accumulation of 3/4 of a scale limit.
- 5. The radiation dosimeter of claim 4, wherein the predetermined dose is limited to ¾ of the scale limit.

- 6. A radiation dosimeter comprising:
- a timer,
- a scale,
- a dose indicator indicating dose accumulation on the scale, and
- a sensor disposed on the scale such that the proximity of the dose indicator produces an indication of a predetermined dose.
- 7. The radiation dosimeter of claim 6, wherein the sensor is an optical sensor accommodating, and reacting to, the passage of the dose indicator.
- 8. The radiation dosimeter of claim 6, wherein the sensor is movably disposed on the scale.
- 9. The radiation dosimeter of claim 6, wherein the scale has a zero end and a full scale end, further comprising a mechanical stop located on the scale between the sensor and the full scale end, restricting the motion of the sensor to the portion of the scale between the zero end and the mechanical stop.
- 10. The radiation dosimeter of claim 9, wherein the mechanical stop is located about 3/4 of the distance on the scale from the zero end of the scale.

- 11. The radiation dosimeter of claim 6, wherein the timer provides a stay time signal after the passage of a stay time and provides check time signals after the passage of each of at least one consecutive check time period.
- 12. The radiation dosimeter of claim 11, wherein the stay time signal and check time signals produce an audible alarm.
- 13. The radiation dosimeter of claim 1, further comprising: a low voltage indicator producing an audible indication of low voltage.
- 14. The radiation dosimeter of claim 1, further comprising: a low voltage indicator producing an audible indication of low voltage.
- 15. The radiation dosimeter of claim 1, further comprising: an exterior casing comprising a top end and a bottom end, wherein the bottom end is flanged.
- 16. The radiation dosimeter of claim 6, further comprising:
  an exterior casing comprising a top end and a bottom end, wherein the bottom end is flanged.